Appendix A -Scope, Schedule, and Compensation

This is an attachment to the Homeland Avenue Stream Location Surveying, Engineering, and Permitting Services Contract, in which details associated with the scope, fee, and schedule are provided. Additionally, specific information regarding project assumptions, CITY responsibilities, work breakdown structure (Attachment A), and CONTRACTOR rate schedule (Attachment B) are also provided in this appendix.

SCOPE OF SERVICES

CONTRACTOR shall provide engineering and other professional services to the CITY as described herein.

TASK 1 – FIELD SERVICES

Description of Sites – This project is located directly east of Barton St and Homeland Avenue, south of Fayetteville St and west of the American Tobacco trail. City of Durham (City) sanitary sewer runs in an easement, meandering an unnamed tributary to Third Fork before crossing Rocky Creek to the north. Both Rocky Creek and its tributary are located within FEMA regulated floodplain and floodway.

Subtask 1A - Wetland/Stream Buffer Delineation — Complete a detailed investigation of the project site for jurisdictional waters of the U.S. The tract will be traversed on foot and the soils, vegetation, and hydrology will be evaluated and potential wetland areas examined by procedures described in the 1987 Corps of Engineers Wetland Delineation Manual. The site will also be evaluated for waters subject to state and local City of Durham stream buffer regulations. Since this is a detailed investigation of jurisdictional waters, the locations of any wetland and stream areas will be located with flagging tape.

Subtask 1B - Geotechnical Investigation - Provide geotechnical services (through a sub-consultant) as follows:

- Collect and analyze three soil borings along the stream site, to 10 feet of depth, using hand equipment or tripod rig.
- Develop a geotechnical report evaluating subsurface conditions relative to excavation/backfill.

TASK 2 - CONSTRUCTION DOCUMENTS

Subtask 2A - Stream and Wetlands Survey Mapping - Prepare an official jurisdictional wetlands map for Corps sign-off, which is valid for five years.

Subtask 2B - Stream Design - 60% Design Drawings - Prepare 60% design drawings showing proposed plan and profiles along with site grading. This set will be completed for 401/404 permitting processes.

Subtask 2C - Wetland & Stream Buffer Concurrence - Coordinate with the U.S. Army Corps of Engineers (Corps) and NC Division of Water Resources (DWR) to obtain concurrence of delineations and a signed wetlands map which will be valid for five years from date of signature.

Subtask 2D - Flood Study – Analyze and prepare design in accordance with a "No-Rise" Certification. Prepare Floodplain Development Permit and submit to City of Durham Floodplain Administrator for review and approval.

Subtask 2E - Stream / Wetland Disturbance Permitting - Provide consultation and prepare applications for NC DENR and the US Army Corps of Engineers (Corps) to acquire proper permits to impact any streams, and/or wetlands. Efforts include creation of impact exhibits, attendance at

coordination meetings with the City and/or their consultants for coordination of design and submittals, and miscellaneous coordination/meetings as requested. Assuming that it will be a minor permitting process with both agencies to facilitate the construction of the site, the following hourly cost estimate will apply:

Subtask 2F - Stream Design - 100% Construction Documents - Prepare Site Plan and Construction Documents using natural channel design techniques for the stream restoration work to be completed as part of the project. Submit Site Plan package to Durham City/County Planning for review. Submit construction documents to Durham County for Land Disturbance permitting. Planting consultation will be provided during construction for coordination of available alternate plants with current growing/planting season. Alternates will be considered based on landscape and/or nursery recommendations and included as submittals in accordance with Specifications. Construction document package will consist of:

- Existing Conditions Plan
- Erosion Control Plan
- Proposed Plan and Profile
- Planting Plan
- Details
- Specifications

Subtask 2G - Site Plan / Land Disturbance Permitting - Prepare application forms as required to submit site plan package to the City and respond to review comments (application fees by City). Also submit Land Disturbance permit package to Durham County and respond to review comments

Subtask 2H - Project Coordination Meetings — Attend coordination meetings with the City and/or their consultants for coordination of design and submittals and miscellaneous coordination/meetings as requested.

Subtask 2I - Public Involvement Meetings – Attend up to three individual land owner meetings or attend a "town hall" style public meeting with exhibits to accurately portray information to the general public or affected parties.

ASSUMPTIONS

Following are assumptions that were used in the development of the Scope of Services and Compensation. Scope and Compensation adjustments may be necessary if these assumptions are incorrect.

- 1. Work completed inside of FEMA regulated floodway, non-encroachment, or floodplain, will be in concurrence with a "No-Rise" certification.
- 2. Construction drawings will be submitted for review and approval in one set of plans showing one phase of construction.
- 3. Construction and/or drainage easements required will be secured by the City.
- 4. Proposal is based on survey and Preliminary Engineering Report (PER) completed by Kimley-Horn and Associates, dated February 14, 2014.
- 5. The survey file associated with the Kimley-Horn and Associates PER will be provided to McAdams at the beginning of the project.
- 6. All fees associated with permitting applications will be paid directly by the City of Durham.
- 7. The following items are not included in this contract:
 - CLOMR/LOMR/CLOMR-F/LOMR-F/LOMA.
 - Off-site roadway improvements design.
 - Construction observation.
 - Construction Staking.
 - Staking for off-site roadway improvements.

- Legal advertisements for construction contracts.
- Court appearances for litigation, or preparation for same.
- Revised directives from the City after design has begun.
- · Retaining wall and/or structural design.
- · Site lighting.
- Topographic surveys, boundary or other location surveys.
- · Greenway design.

DELIVERABLES

The CONTRACTOR shall provide the following deliverables to the CITY:

- 1. 60% design package via electronic delivery (PDF);
- 2. Eight (8) copies and an electronic (PDF) version of the 100% design package;
- 3. All permit and encroachment applications for CITY signature;

CITY RESPONSIBILITIES

The CITY shall perform the following duties for this project:

1. CITY shall conduct all bidding and construction procurement services.

SCHEDULE

The Firm's services shall be performed as expeditiously as is consistent with professional skill and care and the orderly progress of the project. The following is the expected schedule for completion of work on this project:

Schedule to be mutually agreed upon between City and McAdams.

The time limits and schedule set forth above have been agreed to by the CITY and CONTRACTOR, but the time limits and schedule shall be extended for (1) reasonable cause, or for (2) any delays associated with the CONTRACTOR's work on the project that are not the sole responsibility of the CONTRACTOR.

COMPENSATION

CONTRACTOR shall be compensated by the CITY for the SCOPE OF SERVICES described herein as follows:

Task	Not-to-Exceed Fee	Lump Sum Fee
Task 1 - Field Services		
Subtask 1A - Wetland/Stream Buffer Delineation		\$2,500
Subtask 1B – Geotechnical Investigation		\$4,960
Task 2 - Construction Documents		
Subtask 2A - Stream and Wetlands Survey Mapping		\$5,000
Subtask 2B - Stream Design - 60% Design Drawings		\$16,750
Subtask 2C - Wetland & Stream Buffer Concurrence		\$1,000
Subtask 2D - Flood Study		\$9,500
Subtask 2E - Stream / Wetland Disturbance Permitting	\$7,000	
Subtask 2F - Stream Design - 100% Construction Documents		\$38,250
Subtask 2G - Site Plan / Land Disturbance Permitting	\$4,000	
Subtask 2H - Project Coordination Meetings	\$3,000	
Subtask 2I - Public Involvement Meetings	\$4,000	***************************************
TOTALS	\$18,000	\$77,960

The total cost of Not-to-Exceed fees combined with Lump Sum fees is \$95,960.

The Work Task Breakdown associated with the Compensation is provided as Attachment A.

The CONTRACTOR rate schedule to be utilized with "Not-to-Exceed" fee tasks is provided as Attachment B.

Attachment A City of Durham

Homeland Avenue Stream Relocation McAdams Work Task Breakdown

Task	Description	Labor Hrs	Subconsulta	nt Expenses	Total Not-to	о-Ехсеед Рев	Total Lui	np Sum Fee
1	Field Services				***************************************	osacelovarios percetor successiva		
1A	Wetland/Stream Buffer Delineation	40					\$	2,500
18	Geotechnical investigation	0	\$ 4,717.	50 \$ 242.50			\$	4,960
	Task 1 Subtot	il			\$	*	\$	7,460
2,	Construction Documents							
2A	Stream and Wetlands Survey Mapping	56					\$	5,000
28	Stream Design - 60% Design Drawings	152					\$	16,750
2C	Wetland & Stream Buffer Concurrence	8					\$	1,000
20	Flood Study	77					\$	9,500
SE	Stream/Wetland Disturbance Permitting	58			\$	7,000		
2F	Stream Design - 100% Construction Documents	360					\$	38,250
2G	Site Plan/Land Disturbance Permitting	36			\$	4,000		
2H	Project Coordination Meetings	21			\$	3,000		
21	Public Involvement Meetings	27			\$	4,000		
******	Task 2 Subtots	} ·	Sphick services are services	***********************************	\$	18,000	5	70,500
Machine (e) in i			***************************************	m) as a management of the control of	Not-to-Exc	ed Fee	Lump Su	m Fee
			Tota	i Fee Estimate	\$	18,000	\$	77,960
		***************************************		ıl Fee Estimate		954-1044-000-1-0-140-140-1-0-1-0-1-0-1-0-1	A.	95,960



Attachment B McAdams Rate Schedule

1. For contract by hourly charge, the following rates apply:

Chairman, President, Vice President Department Head Senior Project Manager/Sr. Technical Advisor	\$275.00/hour
Department Head	200.00/hour
Senior Project Manager/Sr. Technical Advisor	180.00/hour
Project Manager	145.00/hour
Senior Engineer/Senior Consultant	120.00/hour
Project Engineer/Project Consultant	105.00/hour
CAD/Technical Manager	125.00/hour
Sr. CAD Technician/Sr. Designer	100.00/hour
CAD Technician/Designer	90.00/hour
Jr. CAD Technician/Designer	75.00/hour
Technical Facilitator	95.00/hour
SUE Project Manager	130.00/hour
Senior Survey Project Manager	120.00/hour
Survey Project Manager	105.00/hour
2 Man Survey Crew	125.00/hour
Construction Observer	105.00/hour
Project Coordinator	75.00/hour
Courier	50.00/hour

Hourly services are recorded and rounded to the nearest 1/2 hour.

Hourly rates are subject to adjustment at the beginning of each calendar year.

2. The following are charged in addition to the hourly rates:

Subcontractor Invoices	Cost Plus 5%
Expenses	at cost

3. Projects are billed on a monthly basis and invoices are due upon receipt. Invoices which have been not been paid within 30 days are past due and subject to finance charges of 1.5% per month.

The John R. McAdams Company, Inc.

Raleigh / Durham, NC 2905 Meridian Parkway Durham, North Carolina 27713 (919) 361-5000

Charlotte, NC

11301 Carmel Commons Blvd, Suite 111 Charlotte North Carolina 28226 (704) 527-0800